

TE
205
.C66
1966

CONSTRUCTION

RECORDS

A GUIDE FOR INSPECTORS

CONSTRUCTION DEPARTMENT

IOWA STATE HIGHWAY COMMISSION

MARCH 1966

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STANDARD SIGNS AND SYMBOLS

LINES						
00	0	1	2	3	4	
Rapidograph Pen Nos.						

LETTERING					
Freehand			Mechanical		
Letter Size	No.	Pen#	Guide No.	Wrico Pen	
3/32" I = Hh	3	00	.090"	7	
4/32" I = Ee	4	0	.120"	7	
5/32" I = Kk	5	1	.140"	6	
6/32" I = Mm	6	2	.175"	6	
7/32" I = Rr	7	3	.240"	4	
9/32" I = Ss	8	4	.300"	2	

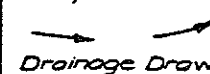
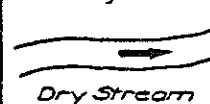
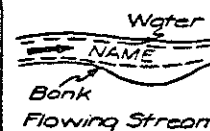
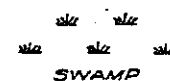
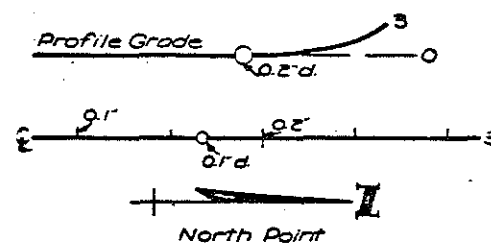
Freehand Lettering Shall Slant 20° F
 Mechanical Lettering Shall Be Vertical E

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm
 Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

1234567890

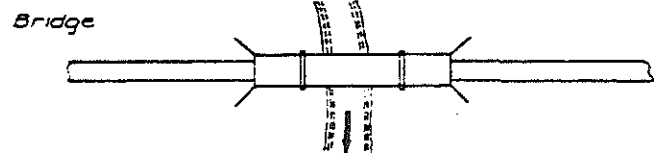
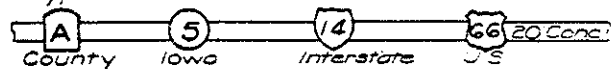
TOPOGRAPHIC SYMBOLS

	Pen
State Line	3
County Line	3
Township Line	3
Section Line	3
Corp Line	0
Urban Bndry	0
Match Line	2
Property Line	0
Lot Line	0
Existing R.O.W.	0
Terrain Line	0



TOPOGRAPHIC SYMBOLS

Route Markings Type Of Surface & Width Indicated



Deciduous Trees
○○○○○○○○○○

Evergreen Trees

Fruit (A) (B) (C)

Stumps B B B



Hedge ~~~~~

Vines - - - - -

Graves ☠☠☠

Pillar o

Cistern & Septic Tank G

Latrine ↑

Sign — (Billboard)

■ Bench Mark & Conc. Manu.

▲ Sec. Cor

■ R.O.W. Rail

■ Lot Cor.

● Tile & Beehive Intake

■ Gr. & Curb Intake

■ Prop Intakes & Storm Sewer

M.H. M.H. M.H.
Exist. Proposed

Hydrant

o Filler Pipe, Valve

□ Well

■ Well With Windmill

o Light Pole With Luminaire

o Power Pole With Luminaire

o Electrolier or Elec. Traffic Sign

TOPOGRAPHIC SYMBOLS

Fences
Barb ——— Pen 0
Mesh ——— 0
Barb & Mesh ——— 0
Board ——— 0

Broken Conc o o o o o

Rock Outcrop |||||

Revetment (Rip Rap) ▲▲▲▲▲

Hand Placed Truck Dumped

Power Poles
* * * * *

Telephone Poles
* * * * *

Guard Rail & Fence Posts
With Rail Without Rail

Dike & Earth Dam
Existing
Proposed

Spoil Bank
◆◆◆◆◆

Retaining Walls
Solid ——— Pen 0
Block ——— 0
Rock or Rubble o o o o o o o o o o

Underground Facilities

Gas ——— G ——— 0
Telephone ——— T ——— 0
Water ——— G.W. ——— 0
Power ——— P ——— C
Storm Sewer ——— 10" St. S. ——— 0
Sanitary Sewer ——— 8" San. ——— 0

Field Tile Drain
Existing Proposed

Culverts
Box ——— Existing Proposed
Pipe ——— Existing Proposed

SAMPLE DIARY SET UP

4-8-64

Monday

WARM
Showers

80°

HOURS - 6:00 - 8:00 9:30 - 6:00

DELAYS - RAIN 8:00 - 9:30

WORKED - CL. TO BAL 932± & 942±

- SELECT CLAY 452. 472±00

- SPEC. COMPACTION

- ROWDY PIPE 945± PL

- FINISH WORK

REMARKS - HAULING CL. TO FROM -

Bore "B" BUILDING SUBGRADE STA

932± TO 942± SELECT CLAY FROM CUT

DITCH SECTION 448 - 460.

SPECIAL SHOES RUTTING MAIN ROAD CAUS-

ING A SOFT SPOT WHICH WILL NEED

CorRECTION STA. 920±00 to 923±00.

SPECIAL COMPACTION IS COMPLETED

IN THIS AREA.

EWO EWO NEEDED FOR UNCOVERED

PAGE WELL STA. 732±56 FILLED WITH

BROKEN CONC. FROM STA 602±50

1

EWO REMOVED AND REPLACED ROWDY

PAGE PIPE AT STA 945±26 PIPE STAKED

MR. WROONG BL SURVEY PARTY.

JONES TALKED TO MR JONES (TENANT

ABOUT REMOVING TEMP FENCE SO

WE CAN COMPLETE CH. CH. SARGALLO

FINISH WORK STARTED TODAY AT

STA 85±00 - 130

ACCIDENT CAR ACCIDENT WITH "C" PULL TODAY

SEE DETAILS ON PAGES BOOK 6 DIST.

EVER VISITED PROTECT TODAY.

DISCUSSED DEPTH OF TRENCH

STA 622 - 626. SAND WE SHOULD INC-

REASE THE DEPTH TO 30 INSTEAD

OF 20 AS SHOWN ON THE PLANS.

SIGNATURE *(Signature)*

NOTE: One page or more can be used

for one days entry but start

each day on a new page.

Underline all important key

words as shown in diary

narrative.

(Signature) (INSE)

PROJECT INFORMATION SHEET

PRIME CONTRACTOR

R.B. & C.B. BURCH INC.

CEDAR RAPIDS, IOWA

SUPERINTENDENT - DON WASHBURN

GRADE FOREMAN - JOHN KING

GRADE FOREMAN - DAVE LARSEN

APPROVED SUB CONTRACTORS

IOWA CONCRETE BREAKING CO.

DES MOINES, IOWA

ITEM #30, 31 & 32 - \$9870.00 - 3.920 %

BREAK OUT FOREMAN - M. SHEETS

SEATON BROS. CONSTRUCTION

POWERSVILLE, MO.

ITEM #3, 13-15, 19-21 & 40.

#7254.95 - 2.888 %

SUPERINTENDENT - BARNEY SEATON

Note : This project information sheet should be on the first page of the diary.
Any additional information that you feel is pertinent to your project should be
listed on this page.

CONTRACT STARTING DATE

CONTRACT COMP. DATE

CONTRACT CALENDAR DAYS

ACTUAL STARTING DATE

ACTUAL COMPLETION DATE

ACTUAL CALENDAR DAYS

LIQUIDATED DAMAGES / DAY \$

INSPECTION PERSONNEL

ASSIGNMENT NAME DATES

CHIEF INSP.

GRADING

PIPE & INCL.

DENSITIES

RECORD OF MATERIAL TESTED
MATERIAL = CEMENT QUAN. REQ = 1186 BBL.

DATE OF TEST	SOURCE OF MTL.	LAB. NO.	TAG NO. OR IDENT.	TESTED BY	MTL. RECEIVED
11-17-65	MARD. CEM. CO.	AC5-19604	ROCK ISLAND 617	DM LAB.	11-25-65
11-20-65	MARD. CEM. CO.	AC5-14282	ROCK ISLAND 7313	DM LAB.	11-28-65
11-20-65	MARD. CEM. CO.	AC5-14283	ROCK ISLAND 7613	DM LAB.	11-28-65

NOTE: The records on material tests should be listed in a separate book. The materials such as cement, reinf. steel, pipe, etc. should be listed on a separate page as shown above.

3

AMT THIS REPORT	AMT TO-DATE	REPORTED	DESIGN NO.	REMARKS
397	397	12-8-65 211B	6664 6764	
394	791	11-30-65 211B	6664 6764	
395	1186	11-30-65 211B	6664 6764	

MEASURED AS PER ARTICLE _____
 QUANTITIES IN FINAL QUAN. BOOK _____ PAGE _____

3

3

ACCIDENT AT TRAFFIC SIGNAL ON CANNING

HILL, MONDAY 4-8-64

ACCIDENT AT 2:15 PM AND UNITS BACK TO WORK AT 2:30 PM.

ROAD CONDITIONS - DRY
WEATHER CONDITIONS - SUNNY - CLEAR.

SIGNAL OPERATOR - MELVIN MULLIN
151 PARK AVE C.B. IA.

"C" PULL OPERATOR - RONNY ROSECK
108 MILLS ST C.B. IA.

TELEPHONE TRUCK DR. - RONALD STEVENS
5010 AVE J C.B. IA.

CAR DRIVER - R. WATERS

LIC. 78-20549 325 BURTON ST C.B. IA.

1963 RAMBLER

APPROX 150.00 DAMAGE

WITNESS - BILL RODENBURG

EASTER-SCHROEDER CONST. CO.

RT. 2 SHELBY IA.

INVESTIGATING OFF - DON SMITH

-PAT C. SHERIFF OFF.

BADGE NO. 212

4

INJURIES - NONE	
TRAFFIC SIGNAL RED	BORROW AREA
WASTE AREA	TRAFFIC SIGNAL RED
1 RAMBLER	"C" PULL TELEPHONE TRUCK
"C" PULL STARTED ACROSS ROAD - SAW CAR COMING AND STOPPED. CAR SIDESWIPPED PULL - CONTINUED ON AND HIT SIDE OF TELE. TRUCK THAT WAS PARKED ON SHOULDER. POLICE TOOK ALL THE DETAILS FROM THOSE INVOLVED. SIGNAL LIGHTS WERE WORKING AND OPERATOR SAID LIGHT WAS RED FOR CAR TO STOP. WATERS SAID HE WAS TRAVELING 20 MPH - NO SKID MARKS ON PAVEMENT.	
INSR. SIGNATURE	

EXTRA WORK ORDER NO. 4	
TO: MULLER EXCAVATING COMPANY	
6801 CENTER STREET, OMAHA, NEBR.	
DATE WORK STARTED	
DATE WORK COMPLETED	
ACTUAL QUANTITY	
MEASURED	
SEE BOOK	PAGE
FOR WORK RECORD	
A-DESCRIPTION:	
INCREASE ITEM 48, CULVERT CONCRETE ROADWAY PIPE, ELLIPTICAL, 23" X 14"	
B-REASON:	
IT IS NECESSARY TO INCREASE THE ABOVE ITEM IN ORDER TO INSTALL ROADWAY PIPE P. 7A TO DRAIN THE AREA EAST OF THE ALLEY LOCATED LEFT OF STATION 5465 ON RELOCATED AVENUE A PER PLAN REVISED DATE SEPTEMBER 22, 1964.	
C-SETTLEMENT:	
CONTACT UNIT PRICE	
INCREASE ITEM 48, CULVERT CONCRETE ROADWAY PIPE, ELLIPTICAL 23" X 14" 40 L.F. @ 7.50	\$ 300.00
CONTRACTOR	W. J. Edm
INSPECTOR	W. J. Edm

[illegible][illegible]

Extra Work

Heating and Protecting Concrete

Date _____ Design Method of Treatment _____
 Heat _____ Heat _____ Protect _____
 Water _____ Wtr's. _____ Only _____ Protect _____

465 C.Y. C.Y.

Furnish Drive And Splice Steel -

Date _____ Location _____ Furn _____ Drive _____ Splices _____

Unit Treated Insp Remarks

Pier #3 Cap

Bearing Piling

X	-	Worked normal day.			
6	-	Number of hours worked. (Less than a normal day)			
0	-	Equipment broke down. (Not available)			
-	-	Available but not worked.			

00

EXCAVATION CL. 10 DAILY HAUL RECORD

7

DATE	HAULED FROM		HAULED TO		DIV. 1 16,325 CY
	STA	STA	STA	STA	
9-9-64	118+00	122+00	110+00	117+00	
9-10-64	118+00	122+00	110+00	117+00	
9-10-64	138+00	140+00	151+00	158+00	
9-12-64	BORROW	A	100+00	110+00	3978
9-13-64	BORROW	A	102+00	110+00	4158
9-14-64	165+00	170+00	180+50	190+00	
9-15-64	165+00	170+00	180+50	190+00	
9-16-64	180+50	186+00	180+50	190+00	

NOTE: This same heading can be used for Cl. 10 channel change and for overhaul. Load count can be gotten by use of counter being used by push cat operator or insp. Station hauled to and from column can be very valuable in computing mass diagram.

DIV. 2 18,000 CY	DIV. 3 26,510 CY	DIV. 4 35,400 C.Y.	LOADS	CU. YD. TO DATE	REMARKS
2890			155	2890	
4590			255	7480	
	3570	1200	265	17,750	SEE DIARY PAGE 26
			221	16,228	
			231	20,386	
		5598	311	25,984	CROSS OVER IN BAL.
		3798	211	29,782	
		4512	251	34,300	

MEASURED AS PER ARTICLE _____
QUANTITIES IN FINAL QUAN. BOOK _____ PAGE _____

10

10

Excavation Location	Class Roll No.	Channel Total Temp Quantities
S. Skunk River near bridge	6	24 167
Sugar Creek	B	1 426
S. Skunk River S of Bridge	7	3 283

Pay Quantities Selected Backfill Delivered	Artical No	Pay Quantities
29,000		9,167
-		1,426
-		3,283
		28,876 C.Y.

Boulders

Dimensions	VOL.	IPSR	CONTR.
Triangle base 6' x 4' 6"	10 CY	JG Owens	E Smith
Length 15'			
Length 19' Height 2'	5 CY	JG Owens	E Smith
Width 7'			
Length 10' Width 8'	15 CY		
Depth 4'	12 CY	JG Owens	E Smith

Date	Location	Excavation	Description and Disposal
11-10-66	97 to 112		Pile of boulders buried Sta 196 P1
11-11-66	141 to 156		Truck load hauled off project
			Estimate 11-14-66
	1188 to 1189		One boulder buried Sta 1188+60 P1

Notes - Be sure to get contractors agreement as to size and volume before disposal. Show quantities for intermediate estimates in distinctive color

*

*

Overhaul By Quantities			
Station To Station	Mass	Station	Yards
1140+00	1	278	492
1176+00	1	321	486
Borrow Pit 1223+00	2	548	392
0+00	3	2	987
Logarithmic	3	6151	357
Total			
#7 Extra work order	2	987	
		1148	370
Tabulated To Here			
Checked J.C. Owens			
Checked T.H. Fink			
Totals here by J.C. Owens			
Checked T.H. Fink			

Remarks
Extra work Order #1176.117 total
Total Carried to form 314

Pay Quantity

Vol Name	Remarks
726 C.Y.	Fill + 10%
8297 C.Y.	Fill + 10%

Note: See current Specification or Special Provision.

Selected Soil Backfill

Location obtained	Tab. No.	Location placed	Tab. No.
1180+00	12	1297+00	15
"	12	11329+00	17

[illegible][illegible][illegible]

MEASURED AS PER ARTICLE _____
QUANTITIES IN FINAL QUAN. BOOK _____ PAGE _____

Moisture and Density Control

Remarks

FWO #8 Added WFO due to grade change

Total to form 314

Compacting Embankment With

Stationing

Tab No

Volume

1146 to 1192400 1 23,493

1192400 to 1207400 2 11,295

1207400 to 1207400 3 489

Totals 35,277

FWO #8 489

34,778

Tabulated To Here J.C. Owens

Checked I.M. Fink

Total J.C. Owens

Checked I.M. Fink

Moisture and Density
Haul and Compaction Record

EX. 1	EX. 2	EX. 3	EX. 4	EX. 5	EX. 6	EX. 7	EX. 8	EX. 9	EX. 10	EX. 11	EX. 12	EX. 13	EX. 14	EX. 15	EX. 16	EX. 17	EX. 18	EX. 19	EX. 20	EX. 21	EX. 22	EX. 23	EX. 24	EX. 25	EX. 26	EX. 27	EX. 28	EX. 29	EX. 30	EX. 31	EX. 32	EX. 33	EX. 34	EX. 35	EX. 36	EX. 37	EX. 38	EX. 39	EX. 40	EX. 41	EX. 42	EX. 43	EX. 44	EX. 45	EX. 46	EX. 47	EX. 48	EX. 49	EX. 50	EX. 51	EX. 52	EX. 53	EX. 54	EX. 55	EX. 56	EX. 57	EX. 58	EX. 59	EX. 60	EX. 61	EX. 62	EX. 63	EX. 64	EX. 65	EX. 66	EX. 67	EX. 68	EX. 69	EX. 70	EX. 71	EX. 72	EX. 73	EX. 74	EX. 75	EX. 76	EX. 77	EX. 78	EX. 79	EX. 80	EX. 81	EX. 82	EX. 83	EX. 84	EX. 85	EX. 86	EX. 87	EX. 88	EX. 89	EX. 90	EX. 91	EX. 92	EX. 93	EX. 94	EX. 95	EX. 96	EX. 97	EX. 98	EX. 99	EX. 100	EX. 101	EX. 102	EX. 103	EX. 104	EX. 105	EX. 106	EX. 107	EX. 108	EX. 109	EX. 110	EX. 111	EX. 112	EX. 113	EX. 114	EX. 115	EX. 116	EX. 117	EX. 118	EX. 119	EX. 120	EX. 121	EX. 122	EX. 123	EX. 124	EX. 125	EX. 126	EX. 127	EX. 128	EX. 129	EX. 130	EX. 131	EX. 132	EX. 133	EX. 134	EX. 135	EX. 136	EX. 137	EX. 138	EX. 139	EX. 140	EX. 141	EX. 142	EX. 143	EX. 144	EX. 145	EX. 146	EX. 147	EX. 148	EX. 149	EX. 150	EX. 151	EX. 152	EX. 153	EX. 154	EX. 155	EX. 156	EX. 157	EX. 158	EX. 159	EX. 160	EX. 161	EX. 162	EX. 163	EX. 164	EX. 165	EX. 166	EX. 167	EX. 168	EX. 169	EX. 170	EX. 171	EX. 172	EX. 173	EX. 174	EX. 175	EX. 176	EX. 177	EX. 178	EX. 179	EX. 180	EX. 181	EX. 182	EX. 183	EX. 184	EX. 185	EX. 186	EX. 187	EX. 188	EX. 189	EX. 190	EX. 191	EX. 192	EX. 193	EX. 194	EX. 195	EX. 196	EX. 197	EX. 198	EX. 199	EX. 200	EX. 201	EX. 202	EX. 203	EX. 204	EX. 205	EX. 206	EX. 207	EX. 208	EX. 209	EX. 210	EX. 211	EX. 212	EX. 213	EX. 214	EX. 215	EX. 216	EX. 217	EX. 218	EX. 219	EX. 220	EX. 221	EX. 222	EX. 223	EX. 224	EX. 225	EX. 226	EX. 227	EX. 228	EX. 229	EX. 230	EX. 231	EX. 232	EX. 233	EX. 234	EX. 235	EX. 236	EX. 237	EX. 238	EX. 239	EX. 240	EX. 241	EX. 242	EX. 243	EX. 244	EX. 245	EX. 246	EX. 247	EX. 248	EX. 249	EX. 250	EX. 251	EX. 252	EX. 253	EX. 254	EX. 255	EX. 256	EX. 257	EX. 258	EX. 259	EX. 260	EX. 261	EX. 262	EX. 263	EX. 264	EX. 265	EX. 266	EX. 267	EX. 268	EX. 269	EX. 270	EX. 271	EX. 272	EX. 273	EX. 274	EX. 275	EX. 276	EX. 277	EX. 278	EX. 279	EX. 280	EX. 281	EX. 282	EX. 283	EX. 284	EX. 285	EX. 286	EX. 287	EX. 288	EX. 289	EX. 290	EX. 291	EX. 292	EX. 293	EX. 294	EX. 295	EX. 296	EX. 297	EX. 298	EX. 299	EX. 300	EX. 301	EX. 302	EX. 303	EX. 304	EX. 305	EX. 306	EX. 307	EX. 308	EX. 309	EX. 310	EX. 311	EX. 312	EX. 313	EX. 314	EX. 315	EX. 316	EX. 317	EX. 318	EX. 319	EX. 320	EX. 321	EX. 322	EX. 323	EX. 324	EX. 325	EX. 326	EX. 327	EX. 328	EX. 329	EX. 330	EX. 331	EX. 332	EX. 333	EX. 334	EX. 335	EX. 336	EX. 337	EX. 338	EX. 339	EX. 340	EX. 341	EX. 342	EX. 343	EX. 344	EX. 345	EX. 346	EX. 347	EX. 348	EX. 349	EX. 350	EX. 351	EX. 352	EX. 353	EX. 354	EX. 355	EX. 356	EX. 357	EX. 358	EX. 359	EX. 360	EX. 361	EX. 362	EX. 363	EX. 364	EX. 365	EX. 366	EX. 367	EX. 368	EX. 369	EX. 370	EX. 371	EX. 372	EX. 373	EX. 374	EX. 375	EX. 376	EX. 377	EX. 378	EX. 379	EX. 380	EX. 381
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50

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MEASURED AS PER ARTICLE _____
QUANTITIES IN FINAL QUAN. BOOK _____ PAGE _____

REMOVAL OF EXISTING STRUCTURES

10

STATION	DESCRIPTION	DATE	
		STARTED	COMPL.
12+40.7	20'x24' CONC. SLAB BR.	8-9-63	8-16-63
196+06	24" Ø CONC. PIPE	8-21-63	8-21-63
2+00	HOUSE FOUNDATION	5-28-63	5-29-63
142+00	PARTIAL 6'x7' RCB	5-29-63	5-30-63
999+75	3x1 FLUME	6-2-63	6-2-63

NOTE: ADBE = As directed by Engineer. Remarks column should show any remark that would help describe the disposal area as the plans usually say plug - remove - ADBE, etc. The removal item is usually a lump sum quantity and measurement is not needed.

DIV	DISPOSAL	CHECKED BY	REMARKS
5	ADBE	B. Outen	USED 4' MEN DRAGLINE AND AIR HAMMERS. BURIED CONC. AT STA 75+00. STEEL TO MAINT. GARAGE
4	PLUG	B. Outen	SEE DIARY PAGE 32
2	ADBE	B. Outen	BURNED TRENCH - HAULED TO WASTE AREA "A"
3	REMOVE	B. Outen	BROKE UP WITH DOZER CONC. HAULED TO STA 150+00
1	REMOVE	B. Outen	HAULED TO WASTE AREA "A"

MEASURED AS PER ARTICLE _____
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Culverts-Removed Stockpile

Location	Date	Rem. Size	Length	Type
DEBUC-110+00	5/2/66	24"	68'	CONC.
DEBUC-110+00	7/14/66	36"	38'	CONC.
Medion				
Sta 1146+30				

Other Items Disposition Remarks Insp

2 Aprons Stockpiled Sta 110+44

Repaired Drive

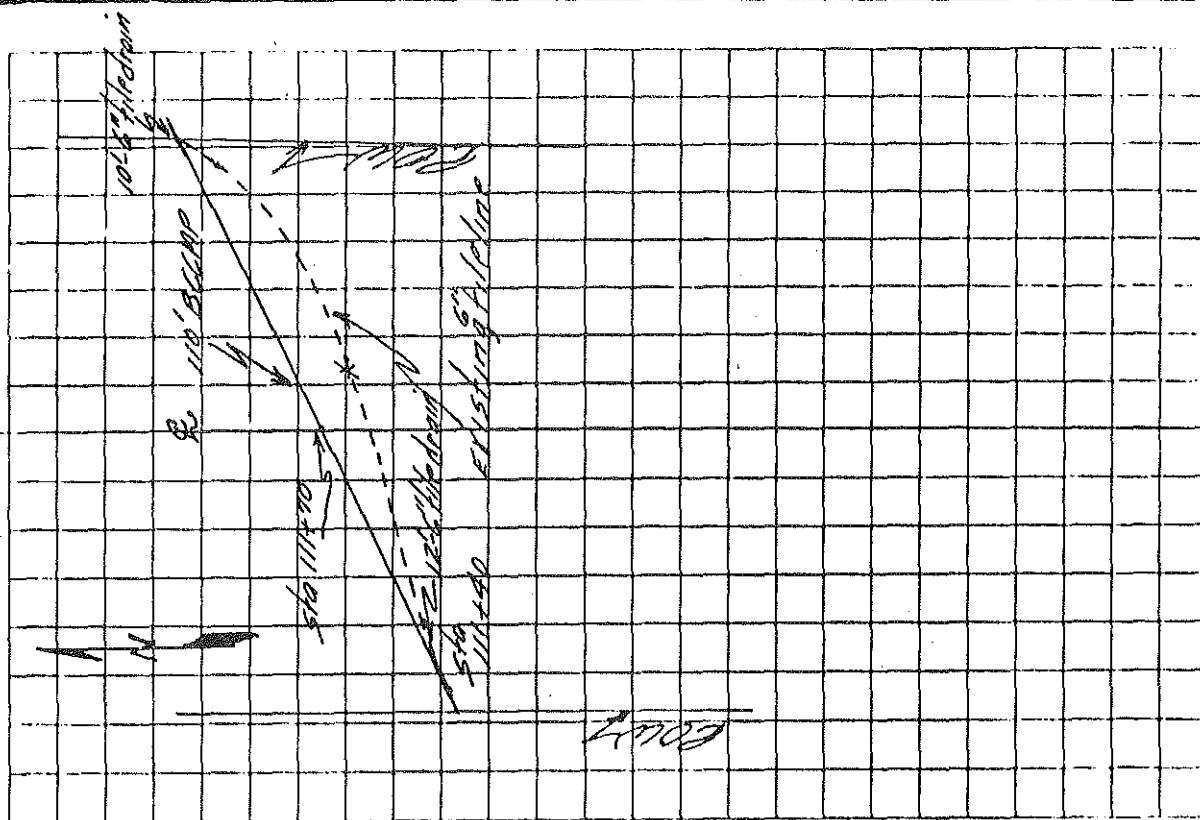
Sta 1174+00 FAS 847

FWD #7

Related Items			
Item No.	Station Location	Subdrains AND Boor SIX inch Page TIES SUB BCCMP	Probeing
11/7/66	110/113 ±	2/18 22'	540'
11/9/66	173/174 ±	2/19	210'
11/10/66	186/188 ±	2/20	
* Estimate	11-12-66		
*		22' 88	750

* Notes - keep transfers from daily notes up to date. Show progress estimate data in distinctive color. By using cut pages this may be continued indefinitely in larger sizes or other items

Station 110-113+



Subdrain Diary

11-7-66 - Probed both ROW lines
5.5' deep. Sta. 110-113+. Located
1.6" tile in good condition each
side. Connected across as per
sketch. Tenant Rex Richards present
during probing and laying, agreed
installation satisfactory. This line
shown on plans

Pay Quantities

6" tile drain 22LF

8" Bit-Coated Corr. Met. P 110LF

Probing 500LF

Large Hole Delect

Contn. Robert Wolfe

Note - Make sketch complete enough
to determine location of both old
and new lines. * Show old lines in color
Show new lines outline

Get pay quantities recorded and
agreed to by contractor upon
completion of lines daily bases if
more than one day is spent on
one line

Transferred to
tabulation 11-9-66

24" Diam. Related Item No's				
Sections	Size	Type	Elbows	Class
1	24" x 24"	—	—	23CY
—	—	—	2 @ 30°	—
1	24" x 24"	—	2 @ 30°	23CY

Continued on next page

Page may be terminated here

Item	Culvert's	Corn	Metals	roadway	Pipe-
Station	Date	Length	Plan	No.	
Location	Laid	Metals	Length	Aprons	
977400	87' 11"	10-12-66	88'	88'	2
980400		10-18-66	76'	76'	1
Estimate		10-20-66	164'	164'	3
General Notes:					
Enter each days work as it is done. Sign and secure Contractors signature at once. If unusual pay items are encountered enter in remarks section and underline in red. Use more than one line if necessary or refer to diary. If pipe unit is partially complete one day enter that days work and use another line for additional work next day. Estimate data may be entered in color.					
Additional related items may be needed. If so, extend into next page.					

Remarks
Land by H.S. Oshtin Co
Completion of median drain lands, Stark

[illegible]

F130"		ROADWAY		PIPE		
STATION	DIV	SKEW	FLOW LINE		PLAN LENGTH	ACTUAL LENGTH
			LT.	RT.		
334+00	3	-	1036.3	1035.5	58	58
70' LT.						
TYPE 1101					3-30 N-28	9-6' SEC 1-4' SEC.

F430"						
STATION	DIV	SKEW	FLOW LINE		PLAN LENGTH	ACTUAL LENGTH
			LT.	RT.		
587+46	4	-	1069.6	1070.0	6	6
40' RT					4	4
TYPE						
1301						

NOTE: This heading can be used for F-1 and CMP of all diameters. The remarks section should include all changes, replaced or broken pieces, flapjacks, diaphragms, elbows, and apron installations. Blocking out each pipe installation and using 2 or 3 to a page is done to leave room for good remarks that many times are needed for variances of quantities, E.W.O.'s, etc. Another page should be made for the cross reference to the above items to include size, station, retail or concrete, etc. as shown on sheet "12".

DATE PLACED	DATE MEASURED	CL. 20 EXCAV.	REMARKS
6-28-63	6-29-63	18	USED 2 APRONS, NEEDED TO REPLACE 2-6' 1-4' SEC. PIPE DUE TO DAMAGE. 1 APRON BROKEN & TO BE REPLACED LATER. BACKFILLED ON 6-30-63. APRON LAID ON 7-1-63

DATE PLACED	DATE MEASURED	CL. 20 EXCAV.	REMARKS
8-17-63	8-17-63	0	USED 2 APRONS. RT. SIDE 6' LENGTH PLUS 8' APRON EXTENDS 14' LT. SIDE, EXTENDED MEASURED BY B. D. Smith 12' (4' SEC PLUS 8' APRON)

MEASURED AS PER ARTICLE _____
QUANTITIES IN FINAL QUAN. BOOK _____ PAGE _____

FIELD & FARM ENT. PIPE & POINTS OF PRIVATE ACCESS

STATION	SIDE	TYPE	REQUIRED						LENGTH PLACED
			18"	24"	30"	36"	42"	48"	
9+95	Lt.	Comm	48'						48'
26+87	Rt	FD	30'						*
48+25	Rt	JRC	48'						58'
84+54	Lt.	JCS				56'			70'
142+43	Rt	FM	46'						38'
448+88	Lt	Comm	46'						46'
460+00	Lt	Comm	46'						52'
517+25	Rt.	FD	38'						*
506+50	Rt	FD	38'						38**

Note: In most cases the entrance pipe is placed according to plan and all the pipe can be set down as above ahead of the actual contract starting date. Any changes can be made and corrected in the remarks column at the actual laying time.
 Pd = Field: Fm = Farm: Jrc = Joint Res. Comm: JCS = Joint Corp. School and Comm = Commercial. Other combinations can be made.

B

DIV.	DATE PLACED	MEASURED		REMARKS
		DATE	BY	
1	6-21-63	6-21-63	D. Conn	
1	9-19-63	9-20-63	D. Conn	ELIMINATED - NO DRAINAGE
1	11-22-63	11-23-63	D. Conn	SHIFTED PIPE TO MEET DRIVE ENT. PIPE 12' FOR SLOPE APPROACH FOR SEMI-TRAILERS.
2	7-11-63	7-11-63	D. Conn	ADDED 4" TO WIDEN SCHOOL ENT. FOR LARGE BUSES.
3	11-18-63	11-18-63	D. Conn	RAISED DITCH GRADE - HAD TO SHORTEN UP PIPE
3	11-30-63	11-30-63	D. Conn	
3	11-30-63	11-30-63	D. Conn	EXTRA PIPE NEEDED TO GET PROPER DRAINAGE FROM SIDE ROAD
4	10-4-63	10-4-63	D. Conn	ELIMINATED - SHIFTED TO STA. 506+50.
4	10-4-63	10-4-63	D. Conn	FROM STA 517+25

MEASURED AS PER ARTICLE _____
 QUANTITIES IN FINAL QUAN. BOOK _____ PAGE _____

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TEMPORARY SURFACING (2000 T/M)

STATION	STATION	LN. FT.	TONS. RED	TONS. PLACED	DATE PLACED
10+50	30+25	1975	680	463.6	5-22-63
10+50	30+25	1975	680	217.0	6-10-63

NOTE: This same heading can be used for calcium chloride, detour surfacing (2000T/M), and for side road surfacing (1350T/M).

NOTE: When using cal. chloride the remarks column should show the amount of water used if water is not a paid item. If water is a paid item, then a new column should be added to the heading. The remarks column should also show the number of loads used, wt. of bags, and the test percentage of cal. chloride as follows:
 "used 61 - 80 lb. bags. 61x80x93.9 (test from Mtl. Dept.) = 4,582.32 or 2.291 tons. If 2.24 tons were required the 2.24 (plan) against 2.291 (used) would give us our yield".

EB

P.Y.	PLACED BY	YIELD	REMARKS
6	C. Stone	68.7	LESS 180' FOR BR. - WILL SPREAD REMAINING ROCK REQUIRED AT A LATER DATE.
	C. Stone	1001	SURFACING COMPLETED.

MEASURED AS PER ARTICLE
 QUANTITIES IN FINAL QUAN. BOOK PAGE

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Item Unit Weight Determination
Class #4 Stone

Date 7-3-66

Producer - Concrete Matrls.
Location - Earham

Truck Length 10'3"

Width 7'4"

Height 3'1"

Truck Gross 54650 lbs.

Tare 11000

Net 43550

Truck Vol. 11.57 C.Y.

Unit Wt 43550 / 11.57 = 3768 # / C.Y.

Observers - R. Owens J. Jones

Computed - R. Owens

Checked - J. Jones

Pay Quantities

Station	Location	Top of L.F.	C.Y. Hauled	Plan C.Y.	Remarks
851400	8357400	Bk 18 Pg 26	24.5	23.5	
898400	903400	Bk 18 Pg 27	21.5	22.5	
Estimate	8-10-66			45.0	
Tabulation By R.C. Owens					
Checked By I.M. Fink					
Totals By R.C. Owens					
Checked By I.M. Fink					

Note - Show progress estimates
in distinctive color

CLEARING & GRUBBING RECORDS

[illegible]

MEASURED AS PER ARTICLE _____
QUANTITIES IN FINAL QUAN. BOOK _____ PAGE _____

Cut HERE

Clearing and Grubbing

Location - M Sta 1270+40 - Sta 1296+70

Date - 9-15-66

Clear and Grub

3-6	6-9	9-12	12-15	15-18	18-24	24-30	30-36	36-42	42-48	48-60	60-72	72 over
HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH	HH HH HH HH HH HH HH HH HH HH

* (53) (34) (23) (18) (6) (3) (3) (3) (6) (3) (2) (1)

** 4240 6630 7705 8460 4050 3300 4350 7500 2400 1800 1600 1000

** x are to be entered with a colored pencil
note: all dollar totals are 100% of specifications

GRUBBING

HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH
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* (13) (8) (2) (1) (2) (1)

** 7.15 11.20 4.80 3.30 28.00 80.00

LOGS and DOWNY TIMBER

HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH	HH HH
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* (3) (2) (1) (1)

total this page \$ 1,419.32

** 120 125 168 235

Running total 1,419.32

** Hedge - 8.5 stations 127.50

** Brush 4.50 1.60

** Growing CORN 624.50 See sketch P. 22 this book 6.24

Inspector J.C. Owens Contr. Warner & Ken

Growing Crops

1150+20 220' 2

--- 9.30

CORN

1176+40 2112

--- 2.40

1175+10 220

Inspector - J. Owens Measured - 10-15-66

Contractor - Warren Steen

Removal by - Contractor

Property Owner - J. Selma Eggs

Tenant - Peter Jensen

Notes - Record sketches of all growing crops destroyed if covered by pay item to contractor or tenant for property - owner on a ROW contract. Be sure date of removal, who removed and what happened to it is recorded.

Also nature of crop - corn, soy beans etc. keep various property owners separate

Computations

$$(8020 - 7640) (80 + 110) = 380 (95) = 3610$$

$$(640 - 510) (110 + 20) = 130 (65) = 8450$$

$$(8020 - 7640) (30 + 40) = 380 (35) = 13300$$

$$62400$$

$$= 62.459$$

$$= 1.4300$$

Computed By - J. Owens

J. M. Fitch

Earth	Remarks	Div.	Date Meas.
			PERSONNEL

[illegible]

[illegible]

VERTICAL SAND DRAIN, PILE & SAND BLANKET

DATE	STA. TO STA.	NO. OF HOLES	L.F. BY DIV.	PLAN C.Y. SAND
9-29-64	883+50 886+50	12	329	3000
9-30-64	883+50 886+50	20	428	
10-1-64	883+50 886+50	66	1533	
10-3-64	883+50 886+50			
10-4-64	883+50 886+50			

SUBDRAINS

DATE	STATION	TYPE	SIZE	CORR. OUTLET L.F.	CORR. PIPE L.F.
10-6-64	883+92	2	6"		130
10-14-64	884+21	2	6"	120	
10-16-64	885+50	2	6"	170	117
10-17-64	931+70	2	6"	67	80

SAND BLANKET

DATE	STA. TO STA.	DESIGN NO.	PLAN C.Y. YDS.	ACTUAL C.Y. YDS.
9-28-64	883+50 886+50		3061.0	1210.8
9-29-64	883+50 886+50			1851.0

Note: The above heading can be used in various combinations. The plans will sometime show a sand blanket with subdrains and some without. Others will include vertical sand drains or other combinations. If the granular material on the plans are given in cu. yds. and the material is delivered in tons show the conversion factor in the remarks section. Be sure to note any overrun and under-run and an explanation. Also be sure to note when porous backfill (usually on subdrains) is used and when granular backfill (sand blankets) are used. These headings are shown on one page to explain the possible combinations but should be separate pages in your book.

ACTUAL C.Y. SAND	PLACED BY	REMARKS
	AB Jones	
	AB Jones	
961	AB Jones	
922	AB Jones	
1130	AB Jones	

D.V. APRON	6"-12" REINFORCED POROUS BACKFILL	PLACED BY	REMARKS
1	1	1	29.0 C. Black SKEW H. 30' AHEAD
1	1	1	C. Black
1	1	1	26.0 C. Black SEE CROSS SECTION
2	1	1	7.0 P. Black OUTLET ON RT.

D.V.	PLACED BY	YIELD	REMARKS
1	D. Jones		
1	D. Jones		

MEASURED AS PER ARTICLE
QUANTITIES IN FINAL QUAN. BOOK PAGE

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Concrete Record - 211-B

Item Unit	Date	Mix No.	%	Tot.	Dry Actual Batch Weights		
Design Number	No	Bot	H ₂ O	H ₂ O	Fine	Coarse	Cemt.
5 Column Footings Pier #1 Des. 6564	10-1-63	S-4 28.1	F 1.8 C 0.8	294	Dry 1584 Wet 1613	1283	645

Cu. Yds		Cement		Steel Placed	% Air	Slump	Heat Code	Initial	Remarks
Req	Req	Used	%						
27.2	17,544	18,221	103.9	✓	3 1/2	58		J.P.	1/2 cy. not used.

Note: Use 2 lines for each entry and separate by heavy line. Dry and Actual batch weights are in same column, as are % Air and Slump. Use ✓ mark to show "Steel placed." Use Heating and Protecting Code and Retarder Code letters shown on 211-B.

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42

Des 1917 465

Item Excavation Class 20

Location	Date	Plan	Remarks

W Abut.	1-10-66	25.	25
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Per 1

Pier 2

F. Abut.

10701

Chas F Hewitt

Art-2204-13 1964 Std Specs Basis-pay

item 9 Excavation Class 2/

LOCATION	DATE	PLAN	MEAS.	REMARKS
111111	11/11/11	111111	111111	111111

Item 10 Excavation Class 24

Location	Date	Plant	meas	Remarks
WETLAND EXCAVATION				CLASS 24

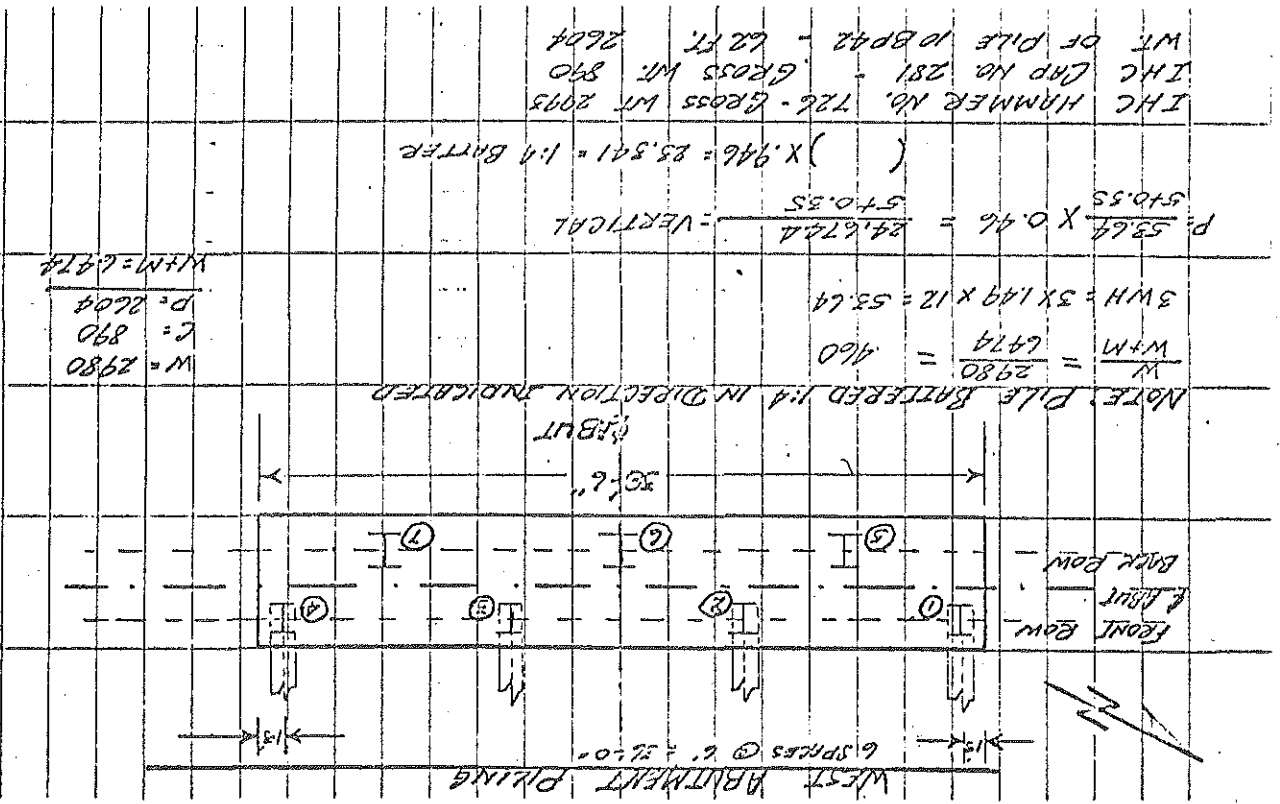
Design 465	Item	Handrail	Aluminum
Location	Date	Li. Meas.	Insp
South	2-1-66	209	WNL
North	2-1-66	209	WNL
Total	418	Li. Meas.	WNL
Measurement	Per Art 2414.07E		
Payment	Per Art 2414.08E		
	1964 Std Specs.		

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PILE NO.	DATE	LENGTH IN FEET	CUT OFF LENGTH IN FEET	LENGTH IN FEET	DRIVE IN FEET	DRIVE IN TONS	REMARKS
B1	6-27-63	62	0.2	61.8	20	12	DRIVE UNIFORM
B2	6-27-63	62	0.5	61.5	20	12	"
B3	6-27-63	62	0.9	61.1	25	12	"
B4	6-27-63	62	0.6	61.4	25	12	"
5	6-27-63	62	0.4	61.6	10	12	TIGHTENED UP IN EDY DRIVE AREA
6	6-27-63	62	0.4	61.6	10	12	SAME AS NO. 5
7	6-27-63	65	0.5	64.5	25	12	ADDED 3' TO GET REGULAR
437 315 430.5							
PAY							
FURNISH - 434							
DRIVE - 430.5							
NO. SPICES - 1 (SEE ENCL.)							
STATEMENT OF SALVAGE							
VALUE OF CUT-OFFS							
SIGNATURE							
CHECKED BY							

MEASURED AS PER ARTICLE
QUANTITIES IN FINAL QUANTITY BOOK PAGE

PIILING LOG



[illegible]

25

DATE RAIL SET	MEASURED BY	REMARKS
7-2-64	W. Bell	
7-2-64	W. Bell	
7-2-64	W. Bell	
7-2-64	W. Bell	
7-4-64	W. Bell	
7-4-64	W. Bell	

MEASURED AS PER ARTICLE _____
QUANTITIES IN FINAL QUAN. BOOK _____ PAGE _____

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52

Design Item	465	Conduit	Rigid Steel 2" Dia.
Location	Date	Meas.	Insp.
South Curb	210-66	240	WLL
North Curb	207-66	216	WLL
		456	L.F. Total Sig.
Basis of payment and Method of measurement per special provision and or notes on the plans			

SUBSTRUCTURE

PIER-5
PIER-6
PIER-7
PIER-8

NORTH
REUT

THIS LINE
MAY BE
CUT FOR
LONGER
BRIDGES

LOG	OF OPERATIONS	PIER-1	PIER-2	PIER-3	PIER-4
	SOUTH ABOUT START				
EXCA. S	6-1-65				
F	FINISH 6-2-65				
PLING S	6-2-65				
F	6-4-65				
FORMS S					
F					
REINF. S					
F					
CONC. S					
F					
FORMS S					
F					
REINF. S					
F					
CONC. S					
F					
FORMS S					
F					
REINF. S					
F					
CONC. S					
F					
BACKFILL	10-16-65				
FINISH	CONCRETE RUBBED AND FINISHED				

CULVERT LAYOUT & BREAKDOWN OF QUANTITIES

DESIGN 3860 - STA. 15+14 - 23+27.

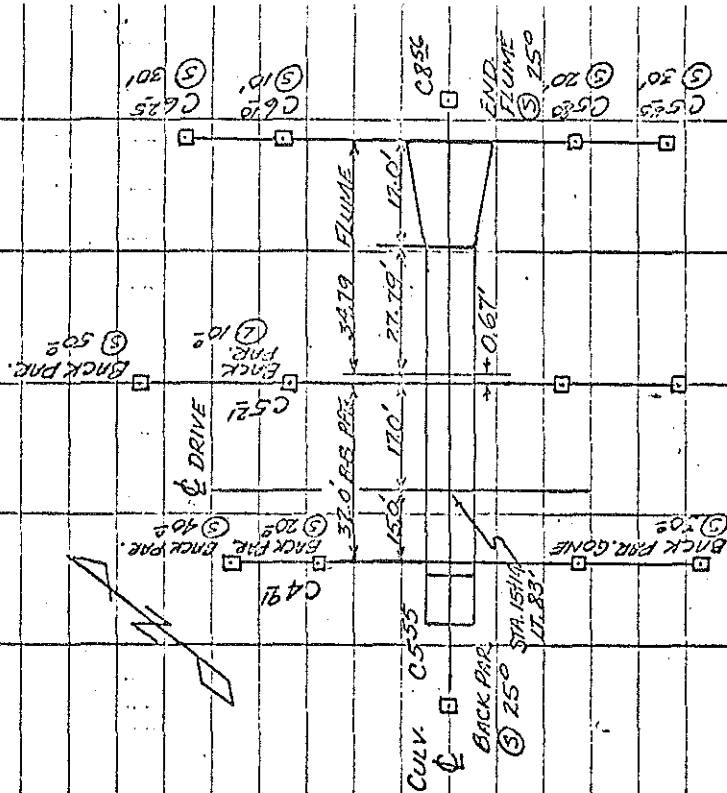
5'X4' X 32' R.C.E. CULVERT 34.79' FLUME

DATE STAKED - 3-22-63

DATE GRADED - 3-22-63

DATE COMPLETED - 4-1-63

DATE ACCEPTED - 5-1-63



32

GENERAL INFORMATION - PAVING	
CONTRACTOR	JENSEN & KRAAF CONST.
PLANT LOCATION	SIOUX CITY, IOWA
	CR & DR. YARDS
	CHARLINA, IOWA
SUPERINTENDENT	
RESIDENT ENGR.	
1 ST GRADE INSP.	
AGGREGATE INSP.	
CEMENT INSP.	
CEMENT	ASH GROVE CEMENT CO.
SAND	LOUISVILLE, NEBRASKA
GRAVEL	CONCRETE MAT'L'S
	WEST DES MOINES, IOWA
	CONCRETE MAT'L'S
	WEST DES MOINES, IOWA
ABSOLUTE VOLUME	MIX C-3
CEMENT	0.14172
SAND	0.297395
GRAVEL	0.365231
WATER	0.163840

DRY BATCH WTS	MIXER - 29.7 Cu. YD.
CEMENT	604 LBS / Cu. YD.
SAND	1328 LBS / Cu. YD.
GRAVEL	1634 LBS / Cu. YD.
SIDE WALK MIX -	MIXER / Cu. YD.
MIX P-3	
CEMENT	604 LBS / Cu. YD.
SAND	1328 LBS / Cu. YD.
LIMESTONE	1634 LBS / Cu. YD.
WATER	276 LBS.

78

TIME	NO.	MOISTURE	AMT. USED PER BATCH	H ₂ O	H ₂ O	ADDED BATCH	H ₂ O	REMARKS
6:30	24	37	0.8	6.64	1548	1851	72	204 276 4.416
8:30	32	37	0.7	6.64	1548	1849	70	204 274 4.412
10:40	44	39	0.7	6.64	1552	1849	74	194 268 4.192
12:00	31	39	0.6	6.64	1552	1847	72	194 266 8.246
TOTAL		153						TOTAL MIXED 41.950 TOTAL WASTED 9.52 TOTAL USED 40.538
DATE 7-1-65								
STARTED @ 6:00 FINISHED @ 1:45								
REPORT NO. 21 SCALES CHECKED @ 6.55 & @ 12.15								
BEAM REPORT								
TEMP. HIGH 88° LOW 65°								
WEATHER - PARTLY CLOUDY & RAIN P.M.								
TIME LOST - CONN. LUNCH, RAINED OUT @ 1:45								
INSPECTION								

CONCRETE PROPORTIONING REPORT			
YDS. PROD.	4442.00		
YDS. TO DATE	3228.23		
YDS. TO LAY	3263.71		
BATCHES LEFT PLANT -	153.0		
BATCHES USED	149.5		
BATCHES LOST	3.5		
PAVING YALD - STA. 612+45 TO 614+87 LT.			
NO. L.F.	244.0		
TOTAL L.F.	892.8		
TOTAL L.F. TO DATE	1136.8		
BATCHES CONC. REQ'D.	145.67		
LBS. CEMENT EST.	96,724.88		
LBS. CEMENT USED	92,268.00		
% CEMENT USED	102.6 %		
% CEMENT FOR CAR UNLOADING			
SR GR. CALCULATIONS	EA. 2.66	CA. 2.68	
H ₂ O/CEMENT RATIO	EA. 2.66	CA. 2.68	
% AIR	0.408		
DATE OF LAST REPORT	5.8		
BEAMS MADE			
STA.		@ TIME	
STA.		@ TIME	

✖

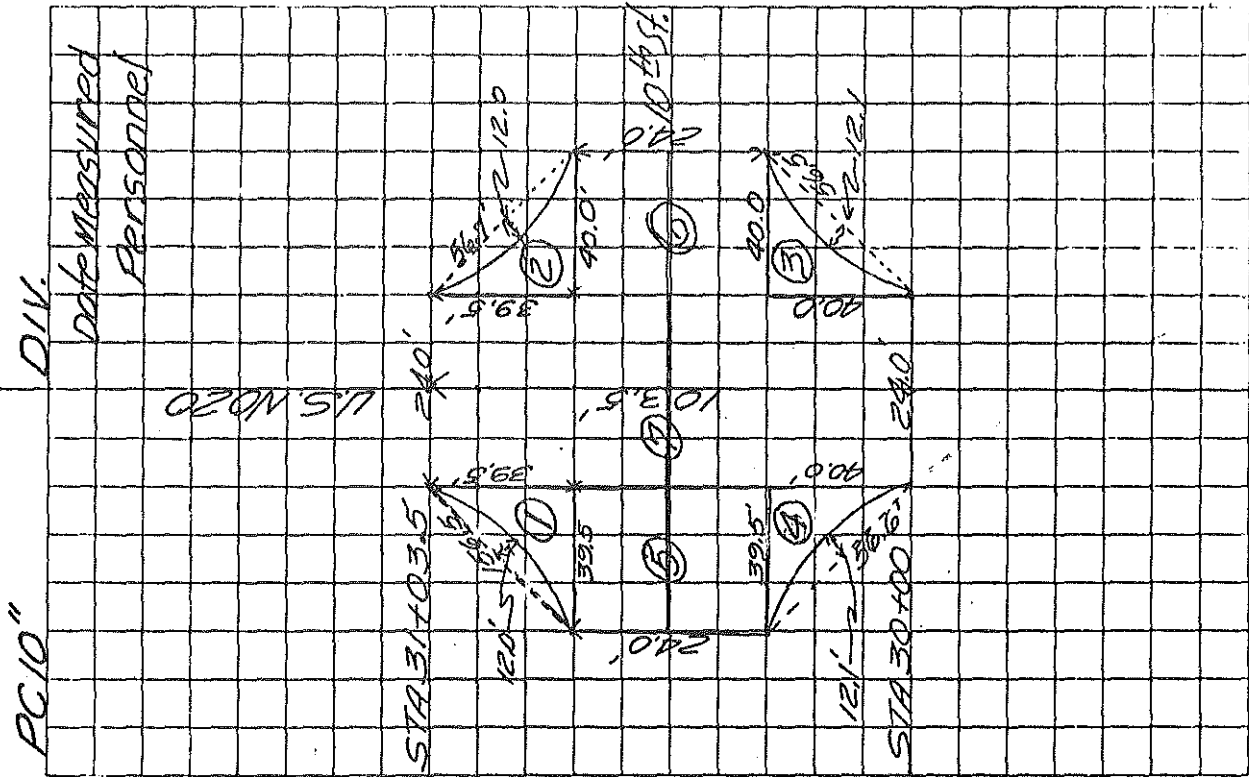
END REMOVAL	COMP. FACTOR	MOD. BUDT.	LOC. BREAK	REMARKS
2305	23635	545	1/2	SP 6'x6' M.H.
2725	24106	657	1/4	
2330	25001	583	1/4	
2725	25001	681	2	

BEAM DATA

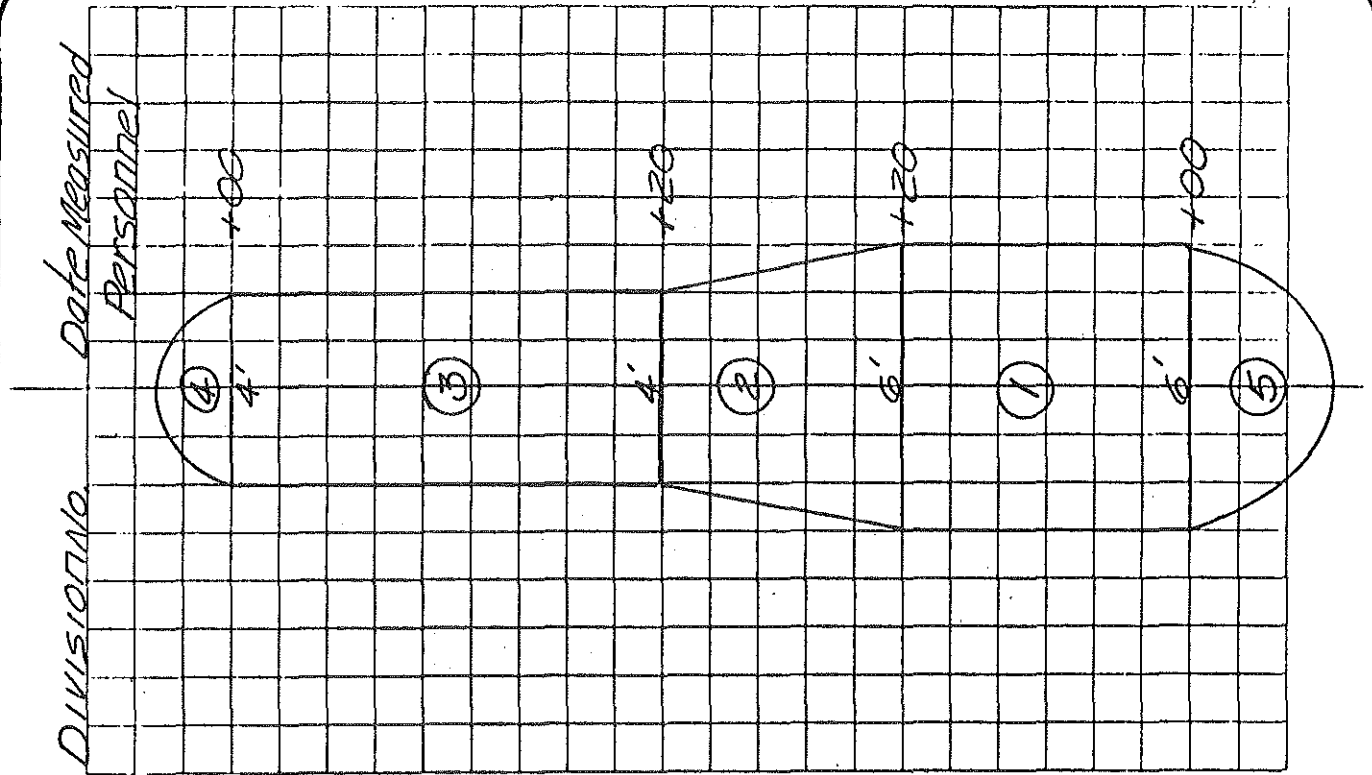
BEAM NO.	MIN NO.	AGE DAYS	W/C CANTO	DATE WIDENED	DATE OPEN	W ₁ DTH	IND. LOAD	ACTUAL LOAD
32A	CIV-A	7	A12	10/12	10/14	6.14	4600	4610
		14	A12	10/14	10/14	6.10	5400	5450
32B	CIV-A	7	A12	10/16	10/16	6.04	4650	4660
		14	A12	10/16	10/16	6.04	5400	5450
33A								
33B								

Item No.	Pavement Standard	Sq. Ft.	Sq. Yds.
1	Computations 39.5 x 39.5 = 1560.25	1560.25	35.81
2	39.5 x 40.0 = 1580.00	1580.00	35.89
3	40.0 x 40.0 = 1600.00	1600.00	36.00
4	39.5 x 40.0 = 1580.00	1580.00	35.89
5	39.5 x 24 = 948.00	948.00	21.67
6	40.0 x 24 = 960.00	960.00	22.00
7	103.5 x 24 = 2484.00	2484.00	56.89
Total		5734.90	637.1

Computed by
Checked by



Item Sta	Area Computations	Concrete Median	Sq. ft.	Sy.
16+00				
	4			
15+00				
	3	(4)	(160)	640
14+00				
	2	$(4+2) \frac{1}{2}$	(100)	500
13+00				
	1	(6)	(120)	720
	5			
12+00		Totals		



Item No.	Pavement	Ave Measured Length S.ft.	S.Y.
Sta.	Width		
10+00	24.6	24.3	501.0
15+00	24.0	24.0	501.5
20+00	24.0		
25+00	24.0		
28+60	24.4		
30+60	24.6		
35+00	24.2		
Total-			
Figured By			
Checked By			

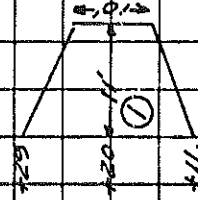
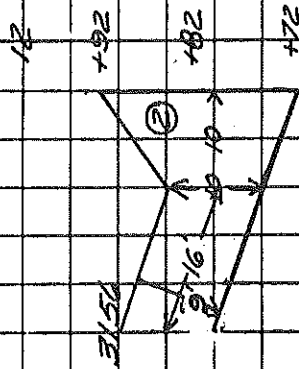
ITEM NO	STA.	Sidewalk Removal	Div No	Date Measured
1	14+00	(4) (50) 200		
2	13+00	(6) (40) 240		
3	12+00	(4) (40) 160		
4	11+00	Total 600 666.6		
5	10+00	Figured by Checked by		

Note: Areas 2 and 3 to be shaded in different colors.
 By contractor.
 per areas crosshatched.

Item No.	Drive	Removal Ord. No.	Computation
2	LT 5th	1482	$\frac{10818}{2} \times 10 + 9 \times 16 =$ $140 + 144 = 2845F$
Should be removed and initials			
1	ET 5th	1420	$\frac{10818}{2} \times 11 = 1545F$
Figured By			
Checked By			

Article No.
Measured
Date Party

Sq Yds



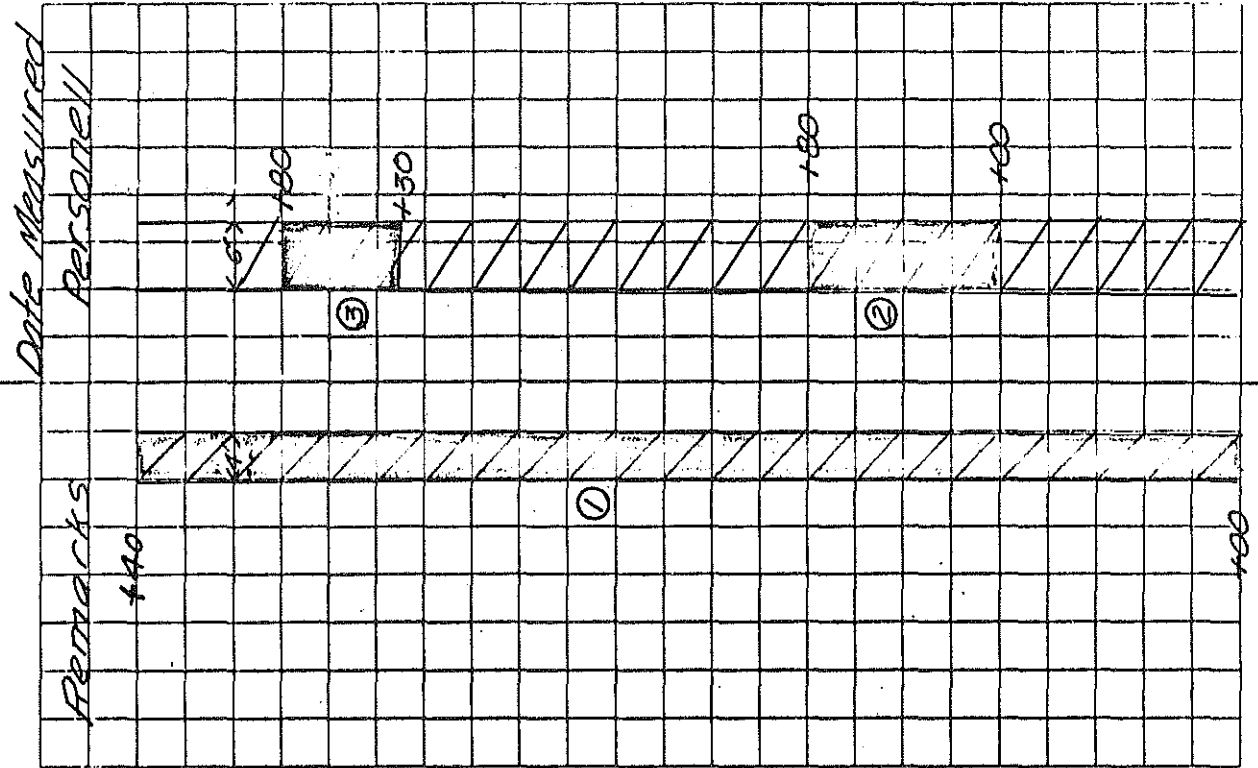
17.11

48.67

11

[illegible]

Item	Sidewalk Area No.	PC Concrete 4 inch Computations	Sq Ft
16+00			
	3	(6) (50)	300
15+00			
	1	(4) (440)	1760
14+00			
	2	(6) (80)	480
13+00			
Figured By			
Checked By			
12+00		Total	2540



Item Area No.	6 in. P.C. Conc. Sidewalk Location	Computation	Div. No. Sq Ft.	Measured Date Party
3	At Sta 12+05	$12.0 \times 5.0 = 60.5F$	60	05 12 ③
2	At Sta 11+74	$12.0 \times 5.0 = 60.5F$	60	+74 ②
1	At Sta 11+34	$14.0 \times 5.0' = 70.5F$	70	+34 ①
Figured By			197	11
Checked By				

[illegible][illegible]

[illegible]

[illegible]

DIV.	Inspector	Date 8-5-60	Remarks
I	J. Smith		V indicates Be Sheet in place.

Indicates Re-Sheet in place.

CONCRETE STORM SEWER OR
SANITARY SEWER.

SIZE	D _v	TYPE	LOCATION		FLOW LINE ELEV.	
			INLET	OUTLET	INLET	OUTLET
15"	1	1500 D	0+22.5 14.5 RT.	0+14.5 21' RT.	978.52	MATCH EXISTING SEWER
		P-65	NO. 36 TH ST.			
15"	1	1500 D	14+93 12' RT.	16+50 40' RT.	975.31	974.01
		P-6	REIDC.	41 ST ST.		

Note: This heading can be used for all sizes of storm and sanitary sewer pipe. Under normal conditions 3 boxed out headings can be used on each page. This gives enough room for all the information needed. In city work it is possible to lay 975' of sewer and may take as much as 18 to 30 days to complete the job, which means you must check the length of pipe to be laid prior to setting up the field book. Intakes, aprons, and etc. should be listed on another page & shown in the remarks column. Private consultants as in the above project use a code no. such as P-65 or P-6 to identify the location & pipe used and this should be shown in the type column. Under location, the street should be shown in addition to stationing in city work. For sanitary sewer use Vitrified Clay Pipe under type if applicable.

PLANNING	LADING	DATE LAID	MEASURED LENGTH	REMARKS
8'	8'	11-1-64	P. 2.00 7.8'	USED 18' 2000 TO MATCH EXISTING 18" SEWER. E.W.O #7 BL. INCLUDES 1-RA-3 INTAKE & 1-RE-2 TYPE C-1 CONC. PIPE ADAPTOR. SEE PAGE 10 & 19 OF BOOK 4.
156'	42	8-3-64	P. 2.00	INCLUDES 1-RE-3
	42	8-4-64	P. 2.00	APRON & 1-GC INTAKE
	34	8-5-64	P. 2.00	SEE PAGE 9 & 12 OF
	38	8-6-64	P. 2.00	BOOK 4.
156'				

MEASURED AS PER ARTICLE
QUANTITIES IN FINAL QUAN. BOOK PAGE

Item	AC Surface Paving
Date	<div> <div> <div>Station</div> <div>From To</div> </div> <div> <div>Div 1</div> <div>Ticket Lbs</div> <div>No Weight</div> </div> </div>
Total for page	
Note - * this for final page on	
* Total Div 1	
* Total Div 2	
* Total Items for project	

Lbs	Lbs	Tons	insp	Remarks
Waste	Used			
Daily total in tons				
insp. signature				
Checked with Contractor				
Date				
Checked by				

DATE	TIME	PRIMER OR DISTRIBUTOR	STOP	GALS.	TEMP.	CORR. FACTOR
DIV 1						
Primer or Jack Coat Bitumen						
Distributor						
START						
STOP						
GALS.						
TEMP.						
CORR. FACTOR						
Total for page						
* Note - For final page only						
* Total Div 1						
* Total Div 2						
* Total Item 3 for Project						

[illegible]

ROLLED STONE BASE HAUL RECORDS

[illegible][illegible]

DESIGN WT. = 145 LB. PER. CU. FT. 44

TONS USED	YIELD	TONS TO DATE	CHECKED BY	D, ✓	REMARKS
135	103.8	135	Cul	3	
316	100.3	451	Cul	3	
1302	100.1	1753	Cul	3	

MEASURED AS PER ARTICLE _____
QUANTITIES IN FINAL QUAN. BOOK _____ PAGE _____

[illegible][illegible]

[illegible]

[illegible]

Shoulders Granular Surfacing

DIV 1
 Stations TO
 FROM
 Date
 Ref. L.F.

Item

100%
 Used
 % Int. Remarks

Art.

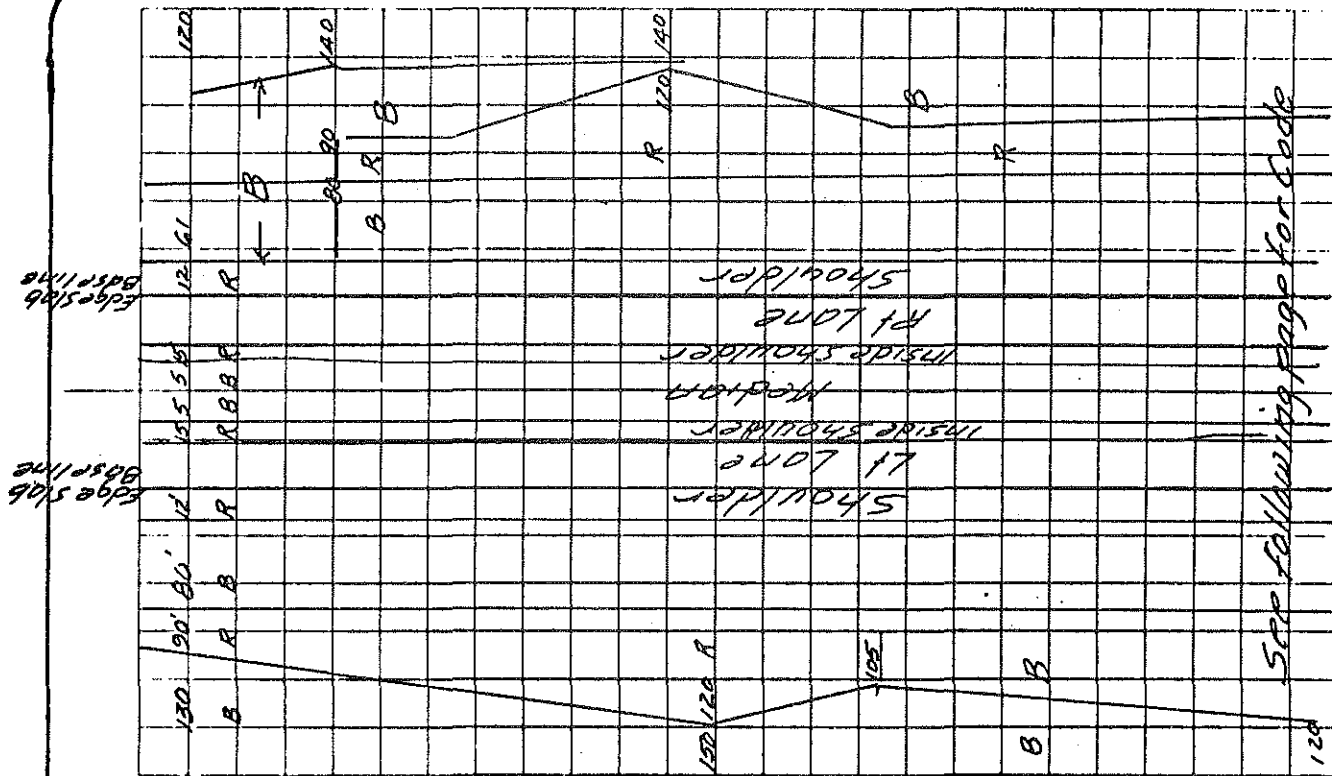
[illegible]

94

X

[illegible][illegible]

[illegible]



This page should show actual field Meas. and sketch

Sta	Lt Side	Median	Rt Side
	Seed	Seed	Seed
	Mulch	Mulch	Mulch
1209			
	$130 \pm 150 \times 200 =$		
	$\frac{2}{2}$		
1208	28000 ins. thick		
1207			
1206			
1205			
1204			
1203			

This page should show computations and total areas of materials

Erosion Control	Color	Code
Seeding	Blue "B"	
Mulching	Red "R"	
Sod	Green "G"	
Net Over Sod	Yellow $\frac{1}{8}$	
Erosion Net	Green $\frac{1}{8}$	
Wire Mesh Over Sod	Yellow	
Wire Mesh	Yellow Y	
Special Seeding	Brown	
	Green $\frac{1}{8}$	
	Brown	
	Brown B	
	Purple	

Item	Sodding	Av.	Measured
Date			
Placed			
Exposed			
Sto to Sta.			
Sidewalk			
Squares			

[illegible]

[illegible][illegible]

[illegible][illegible]

sq ft wall	sq ft for box	sq ft Date	Pen	Sec	M 4 sq	Remarks	msp
			✓	✓	✓		
Total							
Total Pay Quantities							
Inspector's signature							

Item	Special/Ditch Control	date
Done		
Placed		
Sta. to Sta.		
Side Width		
Med. Holes		
Rolls		
Used		

Item Special Diarrh Control - Lite.
 Date Placed Sta to Sta Side Width Meas. Roll's Used

Mesh Over Sod

Sp. Per. 59 59
 Roll Used To Bank Remarks

175P

TOTAL

TOTAL PAY QUANT

175P SIGNATURE

[illegible]

Inspector's Signature

[illegible][illegible]

[illegible][illegible]

[illegible]

42- Sq Ft	5107.3 Type Sq Ft	Total Sq Ft	Sq Ft to date	175P init.	Remarks
Total					Total Sq quantities
Inspector's Signature					

item posts for Type "A" signs

date set	code	measurements
measured	side No	NO. FF. Total
	Sta.	NO. FF.

1952
Total 1940/3 Permar's

[illegible]

Inspector's Signature

[illegible][illegible]

[illegible][illegible]

Total	
Total Pay Quantities	
Inspector's Signature	

Sign 2'x6.5'

NO. 10 1754
DATE 11/11/11 REMARKS

Total

Total to date

Inspector's Signature

Item Concrete Footing for Type "B" -

Date Placed 5/11/11 Sta. 10+00.00 Code 100% Air Slump Placed

Side NO Steel Air Slump Placed

175P
1071

Remarks

1040

Total Pay Quantities

Inspector's Signature

Item Overhead Sign Support

Sto.	Lane	Ft9	Columns	Truss	Struct.
			Erected	Poured	Complete

Ft 9	Columns	Truss	Struct.
Poured	Erected	Poured	Completed

1. Introduction

2. Methodology

3. Results

4. Discussion

5. Conclusion

6. References

7. Appendix

8. Acknowledgments

9. Author Biographies

10. Contact Information

11. Declaration of Interest

12. Data Availability Statement

13. Ethics Statement

14. Funding

15. Supplementary Material

16. References

17. Appendix

18. Acknowledgments

19. Author Biographies

20. Contact Information

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